SECTION B.

DETAILED STATISTICAL TABLES

LIST OF TABLES

Ta	ble Page
S	&E RESEARCH SPACE
1.	Academic science and engineering research space, by field: 1988-2001
2.	Geographic distribution of academic science and engineering research space, by field: 2001 12
3.	Institutional distribution of academic science and engineering research space, by field and type of institution: 2001
4.	Amount of instructional and research space, by type of institution: 2001
5.	Leased academic science and engineering research space, by type of institution: 2001
6.	Percentage of institutions with leased academic science and engineering research space, by field and type of institution: 2001
Sa	&E RESEARCH SPACE NEEDS
7.	Academic science and engineering research space needs, by field: 2001
8.	Academic science and engineering research space needs, by type of institution: 2001
9.	Academic science and engineering research space needs, by geographic distribution: 2001 19
10.	Institutions needing additional academic science and engineering research space, by field: 2001
B	IOMEDICAL RESEARCH SPACE
11.	Geographic distribution of biomedical research space, by field and type of institution: 2001 21
12.	Percentage of institutions with leased biomedical research space, by field and type of institution: 2001

Table 1. Academic science and engineering research space, by field: 1988-2001¹

		Net assignable square feet						Percentage	
Field	[in millions]						change ²		
	1988	1990	1992	1994	1996	1998	1999	2001	1999-2001
All fields	112	116	122	127	136	143	150	155	4
Agricultural sciences	18	21	20	20	22	25	25	27	7
Biological sciences		27	28	28	30	31	32	33	4
Inside all medical schools ^o	8	9	11	11	11	12	13	13	10
Outside medical schools	16	18	17	17	19	19	20	20	0
Computer sciences	1	1	2	2	2	2	2	2	-1
Earth, atmospheric, and ocean sciences	6	6	7	7	7	8	8	8	2
Engineering	16	17	18	21	22	23	25	26	7
Mathematics		1	1	1	1	1	1	1	0
Medical sciences	19	20	22	23	25	25	27	28	4
Inside all medical schools ^a	14	15	16	17	18	18	19	20	5
Outside medical schools	5	5	6	6	7	7	8	8	-1
Physical sciences	16	16	16	17	18	18	19	19	0
Psychology	3	3	3	3	3	3	4	4	8
Social sciences		3	3	3	4	5	5	5	-4
Other sciences	4	2	2	2	2	3	3	3	-4

In past surveys, the year assigned to a survey reflected the year that the survey report was published. For example, the 1998 survey was published in 1998 while the data were collected for 1997. Starting with the 1999 survey, the survey year reflects the year of the current amount of space.

NOTE: Components may not add to totals due to rounding.

² Percentage-change calculations are based on institutions that provided data for both years and on unrounded numbers.

³ Includes stand-alone medical schools.

Table 2. Geographic distribution of academic science and engineering research space, by field: 2001¹

Table 2. Geographic distribution of academic	Net assignable square feet							
E	[in millions]							
Field						EPSCoR	IDeA	
	All States	Northeast	Midwest	South	West	States ²	States ³	
All fields	155.1	31.7	37.1	52.0	33.8	24.7	23.4	
Agricultural sciences	26.7	3.5	7.9	10.3	4.9	6.7	6.6	
Biological sciences	33.4	7.3	8.1	11.0	6.8	4.9	4.4	
Inside all medical schools*	13.1	3.3	3.1	4.7	1.7	1.8	1.5	
Inside all AAMC medical schools ⁴	12.3	3.1	2.9	4.4	1.7	1.6	1.4	
Outside medical schools	20.3	4.0	5.0	6.2	5.0	3.1	2.9	
Computer sciences	2.4	0.8	0.5	0.5	0.5	0.3	0.3	
Earth, atmospheric, and ocean sciences	8.1	1.5	1.4	2.8	2.3	1.7	1.8	
Engineering	25.5	5.2	5.6	9.0	5.6	3.9	3.6	
Mathematics	1.0	0.3	0.3	0.3	0.2	0.2	0.2	
Medical sciences	27.8	6.0	6.3	9.3	6.1	3.2	2.5	
Inside all medical schools*	19.9	4.2	4.4	6.9	4.3	2.3	1.8	
Inside all AAMC medical schools ⁴	19.1	4.0	4.3	6.4	4.3	1.9	1.6	
Outside medical schools	7.9	1.8	1.9	2.5	1.8	0.8	0.7	
Physical sciences	19.2	4.7	4.4	5.5	4.5	2.6	2.5	
Psychology	3.6	0.9	0.9	0.9	0.9	0.4	0.4	
Social sciences	4.5	0.9	1.0	1.5	1.1	0.7	0.7	
Other sciences	3.0	0.7	0.6	0.8	0.8	0.4	0.3	

^{&#}x27; Guam and Puerto Rico are excluded from the regions but are included in other table columns where appropriate.

KEY: AAMC = Association of American Medical Colleges

EPSCoR = Experimental Program to Stimulate Competitive Research

IDeA = Institutional Development Award program

NOTE: Components may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Science Resources Statistics, FY 2001 Survey of Scientific and

Engineering Research Facilities

² States in which institutions are eligible for the National Science Foundation's Experimental Program to Stimulate Competitive Research.

³ States in which institutions are eligible for grants from the Institutional Development Award program of the National Institutes of Health.

^{*} Includes stand-alone medical schools.

 ${\sf Table\ 3.}\ \ \textbf{Institutional\ distribution\ of\ academic\ science\ and\ engineering\ research\ space,\ by\ field$

and type of institution: 2001

and type of montation. 2001	Net assignable square feet								
	[in millions]								
Field	A II	Field	Cor	ntrol	Minority-servi	ng institutions			
	All · · · ·		Drivete	Dublic	2	Hispanic-serving			
	institutions	leaders ¹	Private	Public	HBCUs ²	institutions ³			
All fields	155.1	N/A	42.1	113.0	2.7	4.6			
Agricultural sciences	26.7	13.7	1.7	25.0	0.7	0.3			
Biological sciences	33.4	5.6	11.5	21.9	0.5	1.0			
Inside all medical schools ⁴	13.1	2.9	6.3	6.8	0.2	0.5			
Inside all AAMC medical schools ⁴	12.3	2.9	5.8	6.5	0.2	0.5			
Outside medical schools	20.3	4.6	5.2	15.1	0.3	0.5			
Computer sciences	2.4	0.9	1.1	1.3	0.2	0.1			
Earth, atmospheric, and ocean sciences	8.1	2.2	1.6	6.6	0.1	0.3			
Engineering	25.5	6.8	6.7	18.8	0.5	1.4			
Mathematics	1.0	0.2	0.4	0.6	*	*			
Medical sciences	27.8	7.1	10.2	17.6	0.2	0.6			
Inside all medical schools ⁴	19.9	5.5	8.3	11.5	0.1	0.5			
Inside all AAMC medical schools ⁴	19.1	5.5	8.0	11.2	0.1	0.5			
Outside medical schools	7.9	2.6	1.8	6.1	0.1	0.1			
Physical sciences	19.2	3.6	6.1	13.0	0.4	0.6			
Psychology	3.6	0.7	1.0	2.6	*	0.1			
Social sciences	4.5	1.4	0.9	3.6	*	0.2			
Other sciences	3.0	1.4	0.9	2.0	*	0.1			

¹ Field leaders are the 10 institutions with the most research space in a given field.

KEY: AAMC = Association of American Medical Colleges

HBCUs = Historically Black Colleges and Universities

N/A = Not applicable

* = Less than .05 million

NOTE: Components may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Science Resources Statistics, FY 2001 Survey of Scientific

and Engineering Research Facilities

² Includes all research-performing HBCUs, including the 29 original HBCUs that have been surveyed since 1988.

Institutions where at least 25 percent of the undergraduate full-time equivalent enrollment is Hispanic.

⁴ Includes stand-alone medical schools.

Table 4. Amount of instructional and research space, by type of institution: 2001

		lı	Research		
Type of institution	Number of institutions	Total in all academic fields	Total in S&E fields	Total in non- S&E fields	space in S&E fields
			Net assignab [in mi	le square feet llions]	
Total	571	287	141	146	155
Doctorate-granting	342	237	120	117	147
Top 100 in research expenditures	100	146	76	69	110
Other	242	92	44	48	37
Nondoctorate-granting	229	50	20	29	8
Public	288	203	97	105	113
Doctorate-granting	188	173	87	87	109
Nondoctorate-granting	100	29	11	18	4
Private	283	84	43	41	42
Doctorate-granting	154	64	34	30	38
Nondoctorate-granting	129	20	10	11	4
Minority-serving institutions	90	29	13	17	7
All HBCUs ¹	61	16	8	9	3
Original 29 HBCUs		11	5	6	2
Hispanic-serving institutions ²	29	13	5	8	5

Includes all research-performing HBCUs, including the 29 original HBCUs that have been surveyed since 1988.

KEY: S&E = Science and engineering

HBCUs = Historically Black Colleges and Universities

NOTE: Components may not add to totals due to rounding.

² Institutions where at least 25 percent of the undergraduate full-time equivalent enrollment is Hispanic.

Table 5. Leased academic science and engineering research space, by type of institution: 2001

	•		
	Total S&E research	Leased S&E research	Percentage of
Type of institution	space	space	space leased
	[NASF ir	millions]	
All academic institutions	147.5	6.4	4.4
Doctorate-granting institutions	140.5	6.4	4.5
Nondoctorate-granting institutions	7.0	0.1	1.3
Inside all medical schools ¹	82.5	4.5	5.5
Inside all AAMC medical schools ¹	79.3	4.5	5.7
Outside medical schools	65.0	1.9	3.0
Control			
Public	111.6	4.3	3.9
Private	35.8	2.1	5.9
Minority-serving institutions	6.4	0.2	2.6
All HBCUs ²	2.3	*	1.1
Original 29 HBCUs	1.9	*	1.3
Hispanic-serving institutions ³	4.1	0.1	3.5

¹ Includes stand-alone medical schools.

HBCUs = Historically Black Colleges and Universities

NASF = Net assignable square feet S&E = Science and engineering * = Less than .05 million

NOTES: Components may not add to totals due to rounding.

The values for total S&E research space reported in this table do not include any imputed data for survey nonrespondents. Further, data were not imputed for leased space for survey nonrespondents.

² Includes all research-performing HBCUs, including the 29 original HBCUs that have been surveyed since 1988.

³ Institutions where at least 25 percent of the undergraduate full-time equivalent enrollment is Hispanic.

Table 6. Percentage of institutions with leased academic science and engineering research space,

by field and type of institution: 2001

,	Percentage of institutions							
		Doctorate-granting institutions		Control		Minority-serving institutions		
Field	All institutions	All	Field leaders ¹	Public	Private	HBCUs ²	Hispanic serving institutions ³	
All fields	29.2	45.0	N/A	31.9	24.7	7.1	20.0	
Agricultural sciences	15.9	20.8	60.0	16.3	11.1	0.0	0.0	
Biological sciences	12.1	19.5	50.0	13.4	10.0	2.0	0.0	
Inside all medical schools*	31.8	32.7	40.0	35.6	27.5	33.3	0.0	
Inside all AAMC medical schools*	35.4	35.4	40.0	36.4	34.1	33.3	0.0	
Outside medical schools	7.1	11.8	30.0	9.3	3.2	0.0	0.0	
Computer sciences	5.5	8.7	50.0	6.5	3.6	0.0	8.3	
Earth, atmospheric, and ocean sciences	7.2	10.4	20.0	8.9	2.5	0.0	6.7	
Engineering	17.4	23.0	50.0	20.9	10.1	5.0	12.5	
Mathematics	1.0	1.5	20.0	1.0	0.9	0.0	0.0	
Medical sciences	30.3	37.7	100.0	26.8	38.1	14.3	27.3	
Inside all medical schools*	56.8	58.3	90.0	55.4	58.7	66.7	60.0	
Inside all AAMC medical schools*	62.4	62.4	90.0	60.0	65.9	66.7	75.0	
Outside medical schools	16.5	20.8	40.0	16.4	17.0	5.3	0.0	
Physical sciences	4.7	7.6	60.0	5.9	2.5	0.0	0.0	
Psychology	7.5	11.5	10.0	7.1	8.3	0.0	6.7	
Social sciences	9.4	13.0	40.0	10.2	7.6	0.0	12.5	
Other sciences	11.9	15.7	50.0	11.6	12.5	0.0	0.0	

^{&#}x27; Field leaders are the 10 institutions with the most research space in a given field.

KEY: AAMC = Association of American Medical Colleges

HBCUs = Historically Black Colleges and Universities

N/A = Not applicable

NOTES: Components may not add to totals due to rounding.

Figures are based on only those institutions with research space in a given field.

The values for leased space do not include any imputed data for survey nonrespondents.

SOURCE: National Science Foundation/Division of Science Resources Statistics, FY 2001 Survey of Scientific

and Engineering Research Facilities

² Includes all research-performing HBCUs, including the 29 original HBCUs that have been surveyed since 1988.

³ Institutions where at least 25 percent of the undergraduate full-time equivalent enrollment is Hispanic.

^{*} Includes stand-alone medical schools.

Table 7. Academic science and engineering research space needs, by field: 2001

	Net a	assignable squar [in millions]	Percentage of	Additional space needed	
Field	Available space in 2001	Available space reported as adequate	Additional space needed ¹	NASF reported as adequate	as a percentage of NASF ¹
All fields	147.5	42.7	40.4	29.0	27.4
Agricultural sciences	25.6	7.6	2.7	29.8	10.6
Biological sciences	31.9	8.5	10.0	26.6	31.5
Inside all medical schools ²	12.4	4.0	4.3	32.0	34.9
Inside all AAMC medical schools ²	12.1	3.9	4.1	32.6	33.9
Outside medical schools	19.4	4.5	5.7	23.1	29.3
Computer sciences	2.1	0.6	2.2	26.9	108.5
Earth, atmospheric, and ocean sciences	7.7	2.9	2.0	37.5	25.7
Engineering	24.2	5.7	6.2	23.3	25.7
Mathematics	0.9	0.6	0.6	68.8	69.1
Medical sciences	26.3	6.0	9.0	22.8	34.1
Inside all medical schools ²	18.8	3.5	6.8	18.9	36.4
Inside all AAMC medical schools ²	18.5	3.5	6.7	19.0	36.2
Outside medical schools	7.5	2.4	2.1	32.5	28.3
Physical sciences	18.3	5.9	4.6	32.5	24.9
Psychology	3.4	1.3	1.1	37.0	31.3
Social sciences	4.3	1.7	1.5	38.5	34.3
Other sciences	2.8	2.0	0.5	71.8	17.5

^{&#}x27; Additional space needed is based on current research program commitments.

NASF = Net assignable square feet

NOTES: Components may not add to totals due to rounding.

The values for total S&E research space reported in this table do not include any imputed data for survey nonrespondents.

Further, data were not imputed for available space reported as adequate or additional space needed.

Percentage calculations are based on unrounded numbers.

SOURCE: National Science Foundation/Division of Science Resources Statistics, FY 2001 Survey of

Scientific and Engineering Research Facilities

⁴ Includes stand-alone medical schools.

Table 8. Academic science and engineering research space needs, by type of institution: 2001

	Net assignable square feet [in millions]					
Type of institution	Available space in	Available space	Additional space			
	2001	reported as adequate	needed ¹			
All academic institutions	147.5	42.7	40.4			
Doctorate-granting institutions	140.5	39.4	36.0			
Nondoctorate-granting institutions	7.0	3.3	4.3			
Inside all medical schools ²	82.5	22.7	22.6			
Inside all AAMC medical schools ²	79.3	22.1	21.6			
Outside medical schools	65.0	20.0	17.8			
Control						
Public	111.6	31.1	31.1			
Private	35.8	11.6	9.2			
Minority-serving institutions	6.4	2.4	3.5			
All HBCUs°	2.3	0.8	2.3			
Original 29 HBCUs	1.9	0.7	1.2			
Hispanic-serving institutions⁴	4.1	1.6	1.2			

^{&#}x27; Additional space needed is based on current research program commitments.

HBCUs = Historically Black Colleges and Universities

NOTES: Components may not add to totals due to rounding.

The values for total S&E research space reported in this table do not include any imputed data for survey nonrespondents. Further, data were not imputed for available space reported as adequate or additional space needed.

² Includes stand-alone medical schools.

Includes all research-performing HBCUs, including the 29 original HBCUs that have been surveyed since 1988.

¹ Institutions where at least 25 percent of the undergraduate full-time equivalent enrollment is Hispanic.

Table 9. Academic science and engineering research space needs, by geographic distribution: 2001

Coographia diatribution	Net assignable square feet [in millions]					
Geographic distribution	Available space in 2001	Available space reported as adequate	Additional space needed ¹			
All states ²	147.5	42.7	40.4			
Northeast	29.6	11.8	7.1			
Midwest	35.6	11.3	7.2			
South	49.6	11.0	16.0			
West	32.1	8.6	9.9			
EPSCoR states ³	22.6	6.3	7.4			
IDeA states ⁴	22.2	6.5	7.0			

^{&#}x27; Additional space needed is based on current research program commitments.

KEY: EPSCoR = Experimental Program to Stimulate Competitive Research

IDeA = Institutional Development Award program

NOTES: Components may not add to totals due to rounding.

The values for total S&E research space reported in this table do not include any imputed data for survey nonrespondents. Further, data were not imputed for available space reported as adequate or additional space needed.

⁴ Guam and Puerto Rico are excluded from the regions but are included in other table columns where appropriate.

³ States in which institutions are eligible for the National Science Foundation's Experimental Program to Stimulate Competitive Research.

^{*} States in which institutions are eligible for grants from the Institutional Development Award program of the National Institutes of Health.

Table 10. Institutions needing additional academic science and engineering research space, by field: 2001

	Percentage of	Percentage of institutions needing additional space of				
Field	institutions with no additional space needed	Less than 10 percent of current space	10 percent to 25 percent of current space	More than 25 percent of current space		
All fields	17.7	13.3	18.3	50.7		
Agricultural sciences	43.0	19.6	8.4	29.0		
Biological sciences	33.8	8.8	12.5	44.9		
Inside all medical schools'	33.7	8.2	14.5	43.6		
Inside all AAMC medical schools'	33.6	9.5	15.8	41.1		
Outside medical schools	37.1	7.7	11.1	44.1		
Computer sciences	43.3	1.6	3.5	51.6		
Earth, atmospheric, and ocean sciences	47.7	6.5	10.1	35.7		
Engineering	37.8	10.0	13.6	38.6		
Mathematics	60.9	2.2	4.1	32.8		
Medical sciences	39.6	5.4	14.4	40.6		
Inside all medical schools'	27.1	6.3	25.2	41.4		
Inside all AAMC medical schools'	27.0	7.0	26.0	40.0		
Outside medical schools	48.0	5.7	9.3	37.0		
Physical sciences	40.6	7.4	10.8	41.2		
Psychology	47.2	5.9	5.1	41.8		
Social sciences	47.1	6.0	9.3	37.6		
Other sciences	63.6	4.2	7.6	24.6		

¹ Includes stand-alone medical schools.

NOTES: Figures are based on only those institutions with research space in a given field.

Amount of space needed was assessed relative to current research commitments.

The values for additional space needed do not include any imputed data for survey nonrespondents.

Table 11. Geographic distribution of biomedical research space, by field and type of institution: 2001

	Net assignable square feet [in millions]					
Field and type of institution	All states	Northeast	Midwest	South	West	IDeA program states ¹
Biological sciences	43.3	11.5	9.1	12.6	9.8	5.0
Academic institutions	33.4	7.3	8.1	11.0	6.8	4.4
Inside all medical schools ²	13.1	3.3	3.1	4.7	1.7	1.5
Inside all AAMC medical schools ²	12.3	3.1	2.9	4.4	1.7	1.4
Outside medical schools	20.3	4.0	5.0	6.2	5.0	2.9
Biomedical research institutions	7.4	2.5	0.7	1.3	2.8	0.6
Research hospitals	2.5	1.7	0.3	0.3	0.2	*
Medical sciences	34.9	9.3	7.3	9.9	8.3	3.0
Academic institutions	27.8	6.0	6.3	9.3	6.1	2.5
Inside all medical schools ²	19.9	4.2	4.4	6.9	4.3	1.8
Inside all AAMC medical schools ²	19.1	4.0	4.3	_	4.3	1.6
Outside medical schools	7.9	1.8	1.9	2.5	1.8	0.7
Biomedical research institutions	2.1	0.5	0.4	0.3	1.3	*
Research hospitals	4.7	2.9	0.6	0.3	0.9	0.4

^{&#}x27; States in which institutions are eligible for grants through the Institutional Development Award program of the National Institutes of Health.

IDeA = Institutional Development Award program

* = Less than .05 million

NOTES: Guam and Puerto Rico are excluded from the regions but are included in other appropriate table columns.

Components may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Science Resources Statistics, FY 2001 Survey of

Scientific and Engineering Research Facilities

⁴ Includes stand-alone medical schools.

Table 12. Percentage of institutions with leased biomedical research space, by field and type of institution: 2001

<u> </u>						
Type of institution	Biological sciences	Medical sciences				
All institutions	18	34				
Academic institutions	12	30				
Inside all medical schools ¹	32	57				
Inside all AAMC medical schools ¹	36	63				
Outside medical schools	7	16				
Biomedical research institutions	45	49				
Research hospitals	38	37				

¹ Includes stand-alone medical schools.

KEY: AAMC = Association of American Medical Colleges

SOURCE: National Science Foundation/Division of Science Resources Statistics,

FY 2001 Survey of Scientific and Engineering Research Facilities